

MSC Guidelines for Review of General Arrangements (Subchapters H, I, K & U)

Procedure Number: H2-10

Revision Date: 12/22/99

References

- a. 46 CFR Subchapter H, Part 72, "Construction and Arrangement"
- b. 46 CFR Subchapter I, Part 92, "Construction and Arrangement"
- c. 46 CFR Subchapter K, Part 116, "Construction and Arrangement"
- d. 46 CFR Subchapter U, Part 190, "Construction and Arrangement"
- e. 46 CFR Subchapter S, "Subdivision & Stability"
- f. Marine Safety Center Technical Note 01-95, "Permissible Locations of Class I Watertight Doors".

Disclaimer

These guidelines were developed by the Marine Safety Center staff as an aid in the preparation and review of vessel plans and submissions. They were developed to supplement existing guidance. They are not intended to substitute or replace laws, regulations, or other official Coast Guard policy guidance. The responsibility to demonstrate compliance with all applicable laws and regulations still rests with the plan submitter. The Coast Guard and the U. S. Department of Transportation expressly disclaim liability resulting from the use of this document.

Contact Information

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General Review Guidance for All Vessels

Ensure watertight doors are in permissible locations [Sub S, Subpart H]:

- ❑ Class I watertight doors – ensure compliance with:
 - ❑ 46 CFR 170.255, and
 - ❑ Reference (f)
- ❑ Class II watertight doors – ensure compliance with 46 CFR 170.260.
- ❑ Class III watertight doors – ensure compliance with 46 CFR 170.265.

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Ensure crew quarters are not located farther forward in the vessel than a vertical plane located at 5% of the vessel's length abaft the stem, or that no section of the deckhead of the crew spaces is below the deepest load line. [46 CFR 72.20-10, 92.20-10, 190.20-10].

- ❑ For vessel's not in ocean or coastwise service, the distance abaft the stem need not exceed 28 feet.

Determine if a hospital space is required [46 CFR 72.20-35, 92.20-35, 190.20-35]

Passenger
Vessels Only

For passenger quarters on Subchapter H vessels, ensure the deck forming the deckhead between adjacent watertight bulkheads is not below the deepest load line. [46 CFR 72.25-10]

Ensure watertight doors are in permissible locations [Subchapter S, Subpart H]:

- ❑ Doors must be located in the bulkhead and as far inboard as practicable. [46 CFR 171.112]
- ❑ No more than one door may be fitted in a MTWB with spaces containing the following [46 CFR 171.112(b)]:
 - ❑ Main & auxiliary propulsion machinery.
 - ❑ Propulsion boilers.
 - ❑ Permanent bunkers.
 - ❑ Does not include doors to a bunker or shaft alley.

Determine watertight subdivision standard [46 CFR 171.060]

- ❑ The following vessels must comply with Type I or III subdivision requirements:
 - ❑ Vessels greater than 100 GT on an international voyage; or
 - ❑ Vessels greater than 150 GT in ocean service.
- ❑ Vessels not included above must meet Type II subdivision.

Ensure the distance between transverse watertight bulkheads comply with the applicable subdivision requirements:

- ❑ Vessels required to comply with Type I subdivision requirements must comply with 46 CFR 171.065, 171.067, 171.068.
- ❑ Vessels required to comply with Type II subdivision requirements must comply with 46 CFR 171.070, 171.073.
- ❑ For vessels required to comply with Type III subdivision requirements refer to Procedure Number H2-5, "Probabilistic Damage Stability".

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Ensure the vessel complies with the applicable collision bulkhead requirements of 46 CFR 171.085.

Ensure the vessel complies with the applicable aft peak bulkhead requirements of 46 CFR 171.090.

Ensure the vessel complies with the applicable machinery space bulkhead requirements of 46 CFR 171.095.

Ensure the vessel complies with the applicable shaft tunnel and stern tube requirements of 46 CFR 171.100.

If the vessel design incorporates a double bottom, ensure it complies with the requirements of 46 CFR 171.105-109.

If the vessel is equipped with trunks, ensure they comply with the requirements of 46 CFR 171.113.

Verify main vertical zone lengths [46 CFR 72.05-10, 116.415(d)]. See Navigation and Vessel Inspection Circular (NVIC) No. 8-93 for vessels incorporating long MVZs.

Verify compliance with the accommodation requirements of 46 CFR 72.20 and 72.25, or Part 116, Subparts G & H.

Verify compliance with the applicable rails and guards requirements, if indicated [46 CFR 72.25 or 116, Subpart I].

For vessels incorporating balconies or atriums, see 46 CFR 116.439 or 116.440 for specific requirements.

Cargo &
Oceanographic
Research
Vessels Only

Verify compliance with the accommodation requirements of 46 CFR 92.20 or 190.20.

Verify compliance with the applicable rails and guards requirements, if indicated [46 CFR 92.25 or 190.25].